

## CLAIMS

- 1) Apparatus for continually joining paper webs, comprising means able to compress the said webs (5, 6) onto an impression cylinder or roller (4) while the webs advance  
5 toward an outlet section of the apparatus, characterized in that the said compressive means include a roller or cylinder (2) which exhibits a hard outer surface (20) supported by an underlying elastic surface (23).
- 2) Apparatus according to claim 1, characterized in that the  
10 said elastic surface (23) is in turn supported by a rigid surface (21).
- 3) Apparatus according to claim 1, characterized in that the said outer surface (20) of said compression roller (2) is made up of a helicoidal body having preset pitch and  
15 direction and being applied on said elastic surface (23).
- 4) Apparatus according to claim 1, characterized in that the said outer surface (20) sheathes completely the said elastic surface (23).
- 5) Apparatus according to one or more of the preceding  
20 claims, characterized in that the outer surface (20) of said compression roller (2) is made of steel.
- 6) Apparatus according to one or more of the preceding claims, characterized in that the elastic surface (23) of said compression roller (2) is made of rubber.
- 7) Apparatus according to claim 1, characterized in that the  
25 said impression cylinder (4) is provided with surface reliefs and/or depressions.
- 8) Apparatus according to claim 1, characterized in that the said impression cylinder (4) is an embossing cylinder.
- 9) Method for carrying out the union of two paper webs (5, 6)  
30 by a mutual compression of the concerned webs, characterized in that it includes compressing the said webs between a

pressure roller or cylinder (2) provided with a hard outer surface and an impression roller or cylinder (4) provided with surface reliefs and/or depressions.

10) Method according to claim 9 characterized in that the  
5 said impression cylinder is an embossing cylinder (4).